

CLAIMS

What is claimed is:

- 1 1. A method of tuning an application deployed in an application server,  
2 comprising the steps of:
  - 3 deploying the application in the application server;
  - 4 invoking an application tuning tool to display an interface including
  - 5 displays of current values of application parameters and measurements of
  - 6 performance of the application, wherein the interface displays emphasize
  - 7 importance of a particular parameter over another parameter;
  - 8 receiving specifications of values of application tuning parameters; and
  - 9 tuning the application using the received specified parameter values.
- 1 2. The method of claim 1, wherein the step of invoking the application  
2 tuning tool is performed in response to an action by an administrator, engineer, or  
3 user of the application server.

- 1 3. The method of claim 2, wherein the interface comprises:
  - 2 a first portion operable to display the current values of application
  - 3 parameters; and

4           a second portion operable to display the measurements of performance of  
5    the application.

1    4.     The method of claim 3, wherein the first portion operable to display the  
2    current values of application parameters is further operable to accept input from  
3    the administrator, engineer, or user to specify values of the application  
4    parameters.

1    5.     The method of claim 4, wherein the values of application parameters  
2    comprise at least one of:

3           Database Connection Pool size, Thread Pool Size, HTTP connection  
4    pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5    Session pool size, and Java Virtual Machine tuning parameters.

1    6.     The method of claim 5, wherein the measurements of performance of the  
2    application comprise at least one of Overall transactions per second, Average  
3    Request Time, HTTP transactions per second, Database connections used, HTTP  
4    connections used, Active thread count, Overall throughput, Database throughput,  
5    HTTP throughput.

1 7. The method of claim 2, wherein the interface comprises:  
2 a plurality of tabs, each tab operable to display information relating to a  
3 type of parameters represented by the tab.

1 8. The method of claim 7, wherein the interface further comprises:  
2 a first portion operable to display the current values of application  
3 parameters represented by a selected tab; and  
4 a second portion operable to display the measurements of performance of  
5 the application.

1 9. The method of claim 8, wherein the first portion operable to display the  
2 current values of application parameters represented by a selected tab is further  
3 operable to accept input from the administrator, engineer, or user to specify  
4 values of the application parameters.

1 10. The method of claim 9, wherein the values of application parameters  
2 comprise at least one of:

3           Database Connection Pool size, Thread Pool Size, HTTP connection  
4        pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5        Session pool size, and Java Virtual Machine tuning parameters.

1    11.    The method of claim 10, wherein the measurements of performance of the  
2        application comprise at least one of:

3           Overall transactions per second, Average Request Time, HTTP  
4        transactions per second, Database connections used, HTTP connections used,  
5        Active thread count, Overall throughput, Database throughput, HTTP  
6        throughput.

1    12.    A system for tuning an application deployed in an application server  
2        comprising:

3           a processor operable to execute computer program instructions;  
4           a memory operable to store computer program instructions executable  
5        by the processor; and  
6           computer program instructions stored in the memory and executable to  
7        perform the steps of:  
8           deploying the application in the application server;

9           invoking an application tuning tool to display an interface including  
10          displays of current values of application parameters and measurements of  
11          performance of the application, wherein the interface displays emphasize  
12          importance of a particular parameter over another parameter;  
13          receiving specifications of values of application tuning parameters; and  
14          tuning the application using the received specified parameter values.

1   13.    The system of claim 12, wherein the step of invoking the application  
2   tuning tool is performed in response to an action by an administrator, engineer, or  
3   user of the application server.

1   14.    The system of claim 13, wherein the interface comprises:  
2          a first portion operable to display the current values of application  
3   parameters; and  
4          a second portion operable to display the measurements of performance of  
5   the application.

1   15.    The system of claim 14, wherein the first portion operable to display the  
2   current values of application parameters is further operable to accept input from

3 the administrator, engineer, or user to specify values of the application  
4 parameters.

1 16. The system of claim 15, wherein the values of application parameters  
2 comprise at least one of:

3 Database Connection Pool size, Thread Pool Size, HTTP connection  
4 pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5 Session pool size, and Java Virtual Machine tuning parameters.

1 17. The system of claim 16, wherein the measurements of performance of the  
2 application comprise at least one of:

3 Overall transactions per second, Average Request Time, HTTP  
4 transactions per second, Database connections used, HTTP connections used,  
5 Active thread count, Overall throughput, Database throughput, HTTP  
6 throughput.

1 18. The system of claim 13, wherein the interface comprises:  
2 a plurality of tabs, each tab operable to display information relating to a  
3 type of parameters represented by the tab.

1 19. The system of claim 18, wherein the interface further comprises:  
2 a first portion operable to display the current values of application  
3 parameters represented by a selected tab; and  
4 a second portion operable to display the measurements of performance of  
5 the application.

1 20. The system of claim 19, wherein the first portion operable to display the  
2 current values of application parameters represented by a selected tab is further  
3 operable to accept input from the administrator, engineer, or user to specify  
4 values of the application parameters.

1 21. The system of claim 20, wherein the values of application parameters  
2 comprise at least one of:  
3 Database Connection Pool size, Thread Pool Size, HTTP connection  
4 pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5 Session pool size, and Java Virtual Machine tuning parameters.

1 22. The system of claim 21, wherein the measurements of performance of the  
2 application comprise at least one of:

3 Overall transactions per second, Average Request Time, HTTP  
4 transactions per second, Database connections used, HTTP connections used,  
5 Active thread count, Overall throughput, Database throughput, HTTP  
6 throughput.

1 23. A computer program product for tuning an application deployed in an  
2 application server comprising:

3 a computer readable medium;  
4 computer program instructions, recorded on the computer readable  
5 medium, executable by a processor, for performing the steps of  
6 deploying the application in the application server;  
7 invoking an application tuning tool to display an interface including  
8 displays of current values of application parameters and measurements of  
9 performance of the application, wherein the interface displays emphasize  
10 importance of a particular parameter over another parameter;  
11 receiving specifications of values of application tuning parameters; and  
12 tuning the application using the received specified parameter values.

1 24. The computer program product of claim 23, wherein the step of invoking  
2 the application tuning tool is performed in response to an action by an  
3 administrator, engineer, or user of the application server.

1 25. The computer program product of claim 24, wherein the interface  
2 comprises:

3 a first portion operable to display the current values of application  
4 parameters; and

5 a second portion operable to display the measurements of performance of  
6 the application.

1 26. The computer program product of claim 25, wherein the first portion  
2 operable to display the current values of application parameters is further  
3 operable to accept input from the administrator, engineer, or user to specify  
4 values of the application parameters.

1 27. The computer program product of claim 26, wherein the values of  
2 application parameters comprise at least one of:

3           Database Connection Pool size, Thread Pool Size, HTTP connection  
4        pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5        Session pool size, and Java Virtual Machine tuning parameters.

1   28.   The computer program product of claim 27, wherein the measurements of  
2    performance of the application comprise at least one of Overall transactions per  
3    second, Average Request Time, HTTP transactions per second, Database  
4    connections used, HTTP connections used, Active thread count, Overall  
5    throughput, Database throughput, HTTP throughput.

1   29.   The computer program product of claim 24, wherein the interface  
2    comprises:

3           a plurality of tabs, each tab operable to display information relating to a  
4    type of parameters represented by the tab.

1   30.   The computer program product of claim 29, wherein the interface further  
2    comprises:

3           a first portion operable to display the current values of application  
4    parameters represented by a selected tab; and

5           a second portion operable to display the measurements of performance of  
6   the application.

1   31.   The computer program product of claim 30, wherein the first portion  
2   operable to display the current values of application parameters represented by a  
3   selected tab is further operable to accept input from the administrator, engineer,  
4   or user to specify values of the application parameters.

1   32.   The computer program product of claim 31, wherein the values of  
2   application parameters comprise at least one of:  
3           Database Connection Pool size, Thread Pool Size, HTTP connection  
4   pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5   Session pool size, and Java Virtual Machine tuning parameters.

1   33.   The computer program product of claim 32, wherein the measurements of  
2   performance of the application comprise at least one of:  
3           Overall transactions per second, Average Request Time, HTTP  
4   transactions per second, Database connections used, HTTP connections used,

5 Active thread count, Overall throughput, Database throughput, HTTP  
6 throughput.

1 34. An application tuning tool operable to tune an application deployed in an  
2 application server comprising:

3 an interface including displays of current values of application parameters  
4 and measurements of performance of the application, wherein the interface  
5 displays emphasize importance of a particular parameter over another  
6 parameter;

7 software operable to receive specifications of values of application tuning  
8 parameters; and

9 software operable to tune the application using the received specified  
10 parameter values.

1 35. The application tuning tool of claim 34, wherein the application tuning  
2 tool is invoked in response to an action by an administrator, engineer, or user of  
3 the application server.

1 36. The application tuning tool of claim 35, wherein the interface comprises:  
2 a first portion operable to display the current values of application  
3 parameters; and  
4 a second portion operable to display the measurements of performance of  
5 the application.

1 37. The application tuning tool of claim 36, wherein the first portion operable  
2 to display the current values of application parameters is further operable to  
3 accept input from the administrator, engineer, or user to specify values of the  
4 application parameters.

1 38. The application tuning tool of claim 37, wherein the values of application  
2 parameters comprise at least one of:  
3 Database Connection Pool size, Thread Pool Size, HTTP connection  
4 pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5 Session pool size, and Java Virtual Machine tuning parameters.

1 39. The application tuning tool of claim 38, wherein the measurements of  
2 performance of the application comprise at least one of Overall transactions per

3 second, Average Request Time, HTTP transactions per second, Database  
4 connections used, HTTP connections used, Active thread count, Overall  
5 throughput, Database throughput, HTTP throughput.

1 40. The application tuning tool of claim 35, wherein the interface comprises:  
2 a plurality of tabs, each tab operable to display information relating to a  
3 type of parameters represented by the tab.

1 41. The application tuning tool of claim 40, wherein the interface further  
2 comprises:  
3 a first portion operable to display the current values of application  
4 parameters represented by a selected tab; and  
5 a second portion operable to display the measurements of performance of  
6 the application.

1 42. The application tuning tool of claim 41, wherein the first portion operable  
2 to display the current values of application parameters represented by a selected  
3 tab is further operable to accept input from the administrator, engineer, or user to  
4 specify values of the application parameters.

1    43.    The application tuning tool of claim 42, wherein the values of application  
2    parameters comprise at least one of:

3              Database Connection Pool size, Thread Pool Size, HTTP connection  
4    pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5    Session pool size, and Java Virtual Machine tuning parameters.

1    44.    The application tuning tool of claim 43, wherein the measurements of  
2    performance of the application comprise at least one of:

3              Overall transactions per second, Average Request Time, HTTP  
4    transactions per second, Database connections used, HTTP connections used,  
5    Active thread count, Overall throughput, Database throughput, HTTP  
6    throughput.